

Claims

- [c1] 1. A reactant material dispensing system wherein at least two components are combined comprising:
a metering system that pressurizes the at least two components;
a flow meter that measures a volume of a component passing within;
a conduit fluidly connected between the metering ram and the flow meter;
a mixing chamber that receives the at least two components under pressure;
a nozzle through which a mixture of the at least two components flows.
- [c2] 2. The dispensing system of claim 1 wherein the two components are a catalyst and a base used to form a seal in an article of manufacture.
- [c3] 3. The dispensing system of claim 1 wherein the metering system further comprises a first metering ram that pressurizes the catalyst and a second metering ram that pressurizes the base.
- [c4] 4. The dispensing system of claim 1 wherein a shutoff

valve is located between a supply and the metering ram.

- [c5] 5. The dispensing system of claim 1 wherein a first shut-off valve is located between a catalyst supply and the metering ram and a second shutoff valve is located between a base supply and the metering ram.
- [c6] 6. The dispensing system of claim 1 wherein the mixing chamber is connected to a movable robot arm.
- [c7] 7. The dispensing system of claim 1 wherein a first flow meter is located between a first conduit and the mixing chamber and a second flow meter is located between a second conduit and the mixing chamber.
- [c8] 8. The dispensing system of claim 1 wherein a gun valve is located between the flow meter and the mixing chamber.
- [c9] 9. The dispensing system of claim 1 wherein a first gun valve is located between the first flow meter and the mixing chamber and a second gun valve is located between the second flow meter and the mixing chamber.
- [c10] 10. The dispensing system of claim 1 wherein a pressure sensor is located between the metering system and the nozzle.
- [c11] 11. The dispensing system of claim 1 wherein a first

pressure transducer is located between the first flow meter and the nozzle and a second pressure transducer is located between the second flow meter and the nozzle.